

**United States Environmental Protection Agency
Region 7
901 N. 5th Street
Kansas City, KS 66101**

Date: **AUG 24 2009**

Subject: Transmittal of Sample Analysis Results for ASR #: 4581

Project ID: BMA71700

Project Description: Herculaneum Pb Smelter site - Removal Support/Recontamination soil sampling

From: *fo/* Michael F. Davis, Chief *[Signature]* 8/24/09
Chemical Analysis and Response Branch, Environmental Services Division

To:
Bruce Morrison
SUPR/FFSE

Enclosed are the analytical data for the above-referenced Analytical Services Request (ASR) and Project. The Regional Laboratory has reviewed and verified the results in accordance with procedures described in our Quality Manual (QM). In addition to all of the analytical results, this transmittal contains pertinent information that may have influenced the reported results and documents any deviations from the established requirements of the QM.

Please contact us within 14 days of receipt of this package if you determine there is a need for any changes. Please complete the enclosed Customer Satisfaction Survey and Data Disposition/Sample Release memo for this ASR as soon as possible. The process of disposing of the samples for this ASR will be initiated 30 days from the date of this transmittal unless an alternate release date is specified on the Data Disposition/Sample Release memo.

If you have any questions or concerns relating to this data package, contact our customer service line at 913-551-5295.

Enclosures

cc: Analytical Data File.



Project Manager: Bruce Morrison**Org:** SUPR/FFSE**Phone:** 913-551-7755**Project ID:** BMA71700**Project Desc:** Herculaneum Pb Smelter site - Removal Support/Recontamination soil sampling**Location:** Herculaneum**State:** Missouri**Program:** Superfund**Site Name:** HERCULANEUM LEAD SMELTER SITE - SITE
EVALUATION/DISPOSITION**Site ID:** A717 **Site OU:** 00
GPRA PRC: 302DC6C**Purpose:** Site Cleanup Support**Explanation of Codes, Units and Qualifiers used on this report****Sample QC Codes:** QC Codes identify the type of sample for quality control purpose.**Units:** Specific units in which results are reported.

___ = Field Sample

% = Percent

mg/kg = Milligrams per Kilogram

Data Qualifiers: Specific codes used in conjunction with data values to provide additional information on the quality of reported results, or used to explain the absence of a specific value.

(Blank)= Values have been reviewed and found acceptable for use.

ASR Number: 4581

Sample Information Summary

08/24/2009

Project ID: BMA71700

Project Desc: Herculaneum Pb Smelter site - Removal
Support/Recontamination soil sampling

Sample No	QC Code	Matrix	Location Description	External Sample No	Start Date	Start Time	End Date	End Time	Receipt Date
1 -		Solid	RS-1 (HER-RS-1) = Q2		07/27/2009	14:00			08/14/2009
2 -		Solid	RS-2 (HER-RS-2) = Q4		07/27/2009	15:30			08/14/2009
3 -		Solid	RS-3 (HER-RS-3) = Q3		07/27/2009	08:30			08/14/2009
4 -		Solid	RS-4 (HER-RS-4) = Q1		07/27/2009	09:00			08/14/2009
5 -		Solid	RS-5 (HER-RS-5) = Q4		07/28/2009	09:00			08/14/2009
6 -		Solid	RS-6 (HER-RS-6) = Q3		07/28/2009	09:15			08/14/2009
7 -		Solid	RS-7 (HER-RS-7) = Q4		07/28/2009	10:00			08/14/2009
8 -		Solid	RS-8 (HER-RS-8) = Q4		07/28/2009	14:00			08/14/2009
9 -		Solid	RS-9 (HER-RS-9) = Q2		07/29/2009	08:00			08/14/2009
10 -		Solid	RS-10 (HER-RS-10) = Q4		07/29/2009	09:00			08/14/2009
11 -		Solid	RS-11 (HER-RS-11) = Q3		07/29/2009	10:00			08/14/2009
12 -		Solid	RS-12 (HER-RS-12) = Q2		07/29/2009	13:00			08/14/2009
13 -		Solid	RS-13 (HER-RS-13) = Q1		07/29/2009	15:00			08/14/2009
14 -		Solid	RS-14 (HER-RS-14) = Q1		07/29/2009	16:00			08/14/2009
15 -		Solid	RS-15 (HER-RS-15) = Q4		07/30/2009	13:00			08/14/2009
16 -		Solid	RS-16 (HER-RS-16) = Q2		07/30/2009	13:00			08/14/2009
17 -		Solid	RS-17 (HER-RS-17) = Q1		07/31/2009	10:00			08/14/2009
18 -		Solid	RS-18 (HER-RS-18) = PA		07/31/2009	10:00			08/14/2009
19 -		Solid	RS-19 (HER-RS-19) = Q3		07/31/2009	12:00			08/14/2009
20 -		Solid	RS-20 (HER-RS-20) = Q3		07/31/2009	14:00			08/14/2009

ASR Number: 4581

RLAB Approved Analysis Comments

08/24/2009

Project ID: BMA71700

Project Desc Herculaneum Pb Smelter site - Removal
Support/Recontamination soil sampling

Analysis Comments About Results For This Analysis

1 Metals in Solids by ICP

Lab: Region 7 ESAT Contract Lab (In-House)

Method: EPA Region 7 RLAB Method 3122.3C

Basis: Dry

Samples: 1-__ 2-__ 3-__ 4-__ 5-__ 6-__ 7-__
8-__ 9-__ 10-__ 11-__ 12-__ 13-__ 14-__
15-__ 16-__ 17-__ 18-__ 19-__ 20-__

Comments:

1 Percent Solid

Lab: Region 7 ESAT Contract Lab (In-House)

Method: EPA Region 7 RLAB Method 3142.9E

Basis: N/A

Samples: 1-__ 2-__ 3-__ 4-__ 5-__ 6-__ 7-__
8-__ 9-__ 10-__ 11-__ 12-__ 13-__ 14-__
15-__ 16-__ 17-__ 18-__ 19-__ 20-__

Comments:

(N/A)

ASR Number: 4581

RLAB Approved Sample Analysis Results

08/24/2009

Project ID: BMA71700

Project Desc: Herculaneum Pb Smelter site - Removal
Support/Recontamination soil sampling

Analysis/ Analyte

Units

1-__

2-__

3-__

4-__

1 Metals in Solids by ICP

Lead

mg/kg

469

198

374

188

1 Percent Solid

Solids, percent

%

82.9

88.0

80.4

86.4

ASR Number: 4581

RLAB Approved Sample Analysis Results

08/24/2009

Project ID: BMA71700

Project Desc: Herculaneum Pb Smelter site - Removal
Support/Recontamination soil sampling

Analysis/ Analyte

Units

5-__

6-__

7-__

8-__

1 Metals in Solids by ICP

Lead

mg/kg

169

184

63.2

55.7

1 Percent Solid

Solids, percent

%

94.5

85.0

87.8

86.7

ASR Number: 4581

RLAB Approved Sample Analysis Results

08/24/2009

Project ID: BMA71700

Project Desc: Herculaneum Pb Smelter site - Removal
Support/Recontamination soil sampling

Analysis/ Analyte

Units

9-__

10-__

11-__

12-__

1 Metals in Solids by ICP

Lead

mg/kg

532

281

166

336

1 Percent Solid

Solids, percent

%

95.2

96.7

93.6

80.9

ASR Number: 4581

RLAB Approved Sample Analysis Results

08/24/2009

Project ID: BMA71700

Project Desc: Herculaneum Pb Smelter site - Removal
Support/Recontamination soil sampling

Analysis/ Analyte

Units

13-__

14-__

15-__

16-__

1 Metals in Solids by ICP

Lead

mg/kg

107

93.5

139

436

1 Percent Solid

Solids, percent

%

90.9

85.1

97.4

93.4

ASR Number: 4581

RLAB Approved Sample Analysis Results

08/24/2009

Project ID: BMA71700

Project Desc: Herculaneum Pb Smelter site - Removal
Support/Recontamination soil sampling

Analysis/ Analyte	Units	17-__	18-__	19-__	20-__
1 Metals in Solids by ICP					
Lead	mg/kg	165	229	261	1460
1 Percent Solid					
Solids, percent	%	76.1	77.4	80.4	77.8

**CHAIN OF CUSTODY RECORD
ENVIRONMENTAL PROTECTION AGENCY REGION VII**

ACTIVITY LEADER(Print) <u>Bruce Morrison</u>	NAME OF SURVEY OR ACTIVITY <u>Herulane lead smelter site - Kempton</u>	DATE OF COLLECTION DAY MONTH YEAR 	SHEET <u>1</u> of <u>1</u>
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CONTENTS OF SHIPMENT						SAMPLING					RECEIVING LABORATORY REMARKS/OTHER INFORMATION (condition of samples upon receipt, other sample numbers, etc.)	
SAMPLE NUMBER	TYPE OF CONTAINERS				VOA SET (2 VIALS EA)	SAMPLED MEDIA						
	<u>Whichever</u> SUBTAINER	BOTTLE	BOTTLE	BOTTLE		water	soil	sediment	dust	other		
	NUMBERS OF CONTAINERS PER SAMPLE NUMBER											
458t-1	X					X						
-2												
-3												
-4												
-5												
-6												
-7												
-8												
-9												
-10												
-11												
-12												
-13												
-14												
-15												
-16												
-17												
-18												
-19												
-20												

Complete 8/13/09

Samples Rec'd in
 Fed Exp box no ice.
 OK re PM 8/14/09

DESCRIPTION OF SHIPMENT <u>20</u> PIECE(S) CONSISTING OF <u>1</u> BOX(ES) _____ ICE CHEST(S): OTHER _____	MODE OF SHIPMENT <input checked="" type="checkbox"/> COMMERCIAL CARRIER: <u>1978 4455 2791</u> <input type="checkbox"/> COURIER <input type="checkbox"/> SAMPLER CONVEYED _____ (SHIPPING DOCUMENT NUMBER)
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PERSONNEL CUSTODY RECORD					
RELINQUISHED BY (SAMPLER) <u>[Signature]</u>	DATE <u>8-13-09</u>	TIME <u>0745</u>	RECEIVED BY <u>[Signature]</u>	REASON FOR CHANGE OF CUSTODY <u>Analys</u>	
<input checked="" type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED			<input checked="" type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED		
RELINQUISHED BY	DATE	TIME	RECEIVED BY	REASON FOR CHANGE OF CUSTODY	
<input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED			<input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED		
RELINQUISHED BY	DATE	TIME	RECEIVED BY	REASON FOR CHANGE OF CUSTODY	
<input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED			<input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED		

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 4581 **Sample Number:** 1 **QC Code:** ____ **Matrix:** Solid **Tag ID:** 4581-1-__

Project ID: BMA71700 **Project Manager:** Bruce Morrison
Project Desc: Herculaneum Pb Smelter site - Removal Support/Recontamination soil sampling
City: Herculaneum **State:** Missouri
Program: Superfund
Site Name: HERCULANEUM LEAD SMELTER SITE - SITE EVALUATION/DISPOSITION **Site ID:** A717 **Site OU:** 00

Location Desc: HER-RS-1
External Sample Number: RS-1

Expected Conc: _____ (or Circle One: Low Medium High) **Date** _____ **Time(24 hr)** _____
Latitude: _____ **Sample Collection: Start:** 7/27/09 14:00
Longitude: _____ **End:** / / :

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP
0 -	4 Deg C	0 Days	1 Percent Solid

Sample Comments:

(N/A)

Q2 309 ppm lead
Niton 1544

Sample Collected By: AMP

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 4581 **Sample Number:** 2 **QC Code:** ____ **Matrix:** Solid **Tag ID:** 4581-2-____

Project ID: BMA71700 **Project Manager:** Bruce Morrison
Project Desc: Herculaneum Pb Smelter site - Removal Support/Recontamination soil sampling
City: Herculaneum **State:** Missouri
Program: Superfund
Site Name: HERCULANEUM LEAD SMELTER SITE - SITE EVALUATION/DISPOSITION **Site ID:** A717 **Site OU:** 00

Location Desc: HER-RS-2

External Sample Number: RS-2

Expected Conc: _____ (or Circle One: Low Medium High) **Date** 7/27/09 **Time(24 hr)** 15:30
Latitude: _____ **Sample Collection: Start:** 7/27/09
Longitude: _____ **End:** 7/27/09 15:30

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP
0 -	4 Deg C	0 Days	1 Percent Solid

Sample Comments:

(N/A)

Q4 159 ppm Lead
Niton 1544

Sample Collected By: AMP

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 4581 **Sample Number:** 3 **QC Code:** ____ **Matrix:** Solid **Tag ID:** 4581-3-__

Project ID: BMA71700 **Project Manager:** Bruce Morrison
Project Desc: Herculanum Pb Smelter site - Removal Support/Recontamination soil sampling
City: Herculanum **State:** Missouri
Program: Superfund
Site Name: HERCULANEUM LEAD SMELTER SITE - SITE EVALUATION/DISPOSITION **Site ID:** A717 **Site OU:** 00

Location Desc: HER-RS-3
External Sample Number: HER-RS-3

Expected Conc: _____ (or Circle One: Low Medium High) **Date** _____ **Time(24 hr)** _____
Latitude: _____ **Sample Collection: Start:** 7/27/09 08:30
Longitude: _____ **End:** / / :

Laboratory Analyses:			
Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP
0 -	4 Deg C	0 Days	1 Percent Solid

Sample Comments:
(N/A)

Q3 294 ppm lead
Nitm 1544

Sample Collected By: AMP

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 4581 **Sample Number:** 4 **QC Code:** ____ **Matrix:** Solid **Tag ID:** 4581-4-____

Project ID: BMA71700 **Project Manager:** Bruce Morrison
Project Desc: Herculaneum Pb Smelter site - Removal Support/Recontamination soil sampling
City: Herculaneum **State:** Missouri
Program: Superfund
Site Name: HERCULANEUM LEAD SMELTER SITE - SITE EVALUATION/DISPOSITION **Site ID:** A717 **Site OU:** 00

Location Desc: HER-RS-4
External Sample Number: HER-RS-4

Expected Conc: _____ (or Circle One: Low Medium High) **Date** _____ **Time(24 hr)** _____
Latitude: _____ **Sample Collection: Start:** 7/27/09 09:00
Longitude: _____ **End:** 1/1/ ::

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP
0 -	4 Deg C	0 Days	1 Percent Solid

Sample Comments:

(N/A)

Q1 120 ppm Lead
Niton 1544

Sample Collected By: AMP

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 4581 **Sample Number:** 5 **QC Code:** ____ **Matrix:** Solid **Tag ID:** 4581-5-____

Project ID: BMA71700 **Project Manager:** Bruce Morrison
Project Desc: Herculaneum Pb Smelter site - Removal Support/Recontamination soil sampling
City: Herculaneum **State:** Missouri
Program: Superfund
Site Name: HERCULANEUM LEAD SMELTER SITE - SITE EVALUATION/DISPOSITION **Site ID:** A717 **Site OU:** 00

Location Desc: HER-RS-5
External Sample Number: HER-RS-5

Expected Conc: _____ (or Circle One: Low Medium High) **Date** _____ **Time(24 hr)** _____
Latitude: _____ **Sample Collection: Start:** 7/28/09 09:00
Longitude: _____ **End:** / / :

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP
0 -	4 Deg C	0 Days	1 Percent Solid

Sample Comments:

(N/A)

Q4 130 ppm lead
Nitm 1544

Sample Collected By: AMP

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 4581 **Sample Number:** 6 **QC Code:** ____ **Matrix:** Solid **Tag ID:** 4581-6-__

Project ID: BMA71700 **Project Manager:** Bruce Morrison
Project Desc: Herculanum Pb Smelter site - Removal Support/Recontamination soil sampling
City: Herculanum **State:** Missouri
Program: Superfund
Site Name: HERCULANEUM LEAD SMELTER SITE - SITE EVALUATION/DISPOSITION **Site ID:** A717 **Site OU:** 00

Location Desc: HER-RS-6
External Sample Number: HER-TMR RS-6
Expected Conc: (or Circle One: Low Medium High) **Date:** 7/28/09 **Time(24 hr):** 09:15
Latitude: ____ **Sample Collection: Start:** ____ **End:** ____
Longitude: ____

Laboratory Analyses:			
Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP
0 -	4 Deg C	0 Days	1 Percent Solid

Sample Comments:
(N/A) Q3 146 ppm Lead
Niton 1544

Sample Collected By: AMP

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 4581 **Sample Number:** 7 **QC Code:** ____ **Matrix:** Solid **Tag ID:** 4581-7-____

Project ID: BMA71700 **Project Manager:** Bruce Morrison
Project Desc: Herculaneum Pb Smelter site - Removal Support/Recontamination soil sampling
 City: Herculaneum **State:** Missouri
Program: Superfund
Site Name: HERCULANEUM LEAD SMELTER SITE - SITE **Site ID:** A717 **Site OU:** 00
 EVALUATION/DISPOSITION

Location Desc: HER-RS-7

External Sample Number: RS-7

Expected Conc: (or Circle One: Low Medium High) **Date** **Time(24 hr)**
Latitude: ____ **Sample Collection: Start:** 7/28/09 10:00
Longitude: ____ **End:** / / :

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP
0 -	4 Deg C	0 Days	1 Percent Solid

Sample Comments:
(N/A)

Q4 49 ppm Lead
Niton 1544

Sample Collected By: AMP

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 4581 **Sample Number:** 8 **QC Code:** ____ **Matrix:** Solid **Tag ID:** 4581-8-____

Project ID: BMA71700 **Project Manager:** Bruce Morrison
Project Desc: Herculaneum Pb Smelter site - Removal Support/Recontamination soil sampling
City: Herculaneum **State:** Missouri
Program: Superfund
Site Name: HERCULANEUM LEAD SMELTER SITE - SITE EVALUATION/DISPOSITION **Site ID:** A717 **Site OU:** 00

Location Desc: HER-RS-8

External Sample Number: RS-8

Expected Conc: _____ (or Circle One: Low Medium High) **Date** **Time(24 hr)**

Latitude: _____

Sample Collection: Start: 7/28/09

14:00

Longitude: _____

End: / /

 :

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP
0 -	4 Deg C	0 Days	1 Percent Solid

Sample Comments:

(N/A)

Q4 45ppm lead

Niton 1544

Sample Collected By: AMP

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 4581 **Sample Number:** 9 **QC Code:** ____ **Matrix:** Solid **Tag ID:** 4581-9-____

Project ID: BMA71700 **Project Manager:** Bruce Morrison
Project Desc: Herculaneum Pb Smelter site - Removal Support/Recontamination soil sampling
City: Herculaneum **State:** Missouri
Program: Superfund
Site Name: HERCULANEUM LEAD SMELTER SITE - SITE EVALUATION/DISPOSITION **Site ID:** A717 **Site OU:** 00

Location Desc: _____

HER-RS-9

External Sample Number: _____

RS-9

Expected Conc: _____ (or Circle One: Low Medium High)

Date

Time(24 hr)

Latitude: _____

Sample Collection: Start:

7/29/09

08:00

Longitude: _____

End: ____/____/____

____:____

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP
0 -	4 Deg C	0 Days	1 Percent Solid

Sample Comments:

(N/A)

Q2

440 ppm Lead

Niton 1544

Sample Collected By: AMP

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 4581 **Sample Number:** 10 **QC Code:** ____ **Matrix:** Solid **Tag ID:** 4581-10-__

Project ID: BMA71700 **Project Manager:** Bruce Morrison
Project Desc: Herculaneum Pb Smelter site - Removal Support/Recontamination soil sampling
 City: Herculaneum **State:** Missouri
Program: Superfund
Site Name: HERCULANEUM LEAD SMELTER SITE - SITE **Site ID:** A717 **Site OU:** 00
 EVALUATION/DISPOSITION

Location Desc: HER-RS-10

External Sample Number: HER-RS-10

Expected Conc: (or Circle One: Low Medium High) **Date** **Time(24 hr)**

Latitude: ____

Sample Collection: Start: 7/29/09

09:00

Longitude: ____

End: ____

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP
0 -	4 Deg C	0 Days	1 Percent Solid

Sample Comments:

(N/A)

Q4 240 ppm lead
Niton 1544

Sample Collected By: AMP

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 4581 **Sample Number:** 11 **QC Code:** ____ **Matrix:** Solid **Tag ID:** 4581-11-____

Project ID: BMA71700 **Project Manager:** Bruce Morrison
Project Desc: Herculaneum Pb Smelter site - Removal Support/Recontamination soil sampling
City: Herculaneum **State:** Missouri
Program: Superfund
Site Name: HERCULANEUM LEAD SMELTER SITE - SITE EVALUATION/DISPOSITION **Site ID:** A717 **Site OU:** 00

Location Desc: HER-RS-11
External Sample Number: RS-11

Expected Conc: (or Circle One: Low Medium High) **Date** **Time(24 hr)**
Latitude: ____ **Sample Collection: Start:** 7/29/09 10:00
Longitude: ____ **End:** / / :

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP
0 -	4 Deg C	0 Days	1 Percent Solid

Sample Comments:

(N/A)

Q3

125 ppm lead

Nitron 1544

Sample Collected By: AMP

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 4581 **Sample Number:** 12 **QC Code:** ____ **Matrix:** Solid **Tag ID:** 4581-12-__

Project ID: BMA71700 **Project Manager:** Bruce Morrison
Project Desc: Herculaneum Pb Smelter site - Removal Support/Recontamination soil sampling
City: Herculaneum **State:** Missouri
Program: Superfund
Site Name: HERCULANEUM LEAD SMELTER SITE - SITE EVALUATION/DISPOSITION **Site ID:** A717 **Site OU:** 00

Location Desc: HER-RS-12

External Sample Number: RS-12

Expected Conc: (or Circle One: Low Medium High) **Date** **Time(24 hr)**

Latitude: ____

Sample Collection: Start:

7/29/09

13:00

Longitude: ____

End: ____

__:

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP
0 -	4 Deg C	0 Days	1 Percent Solid

Sample Comments:

(N/A)

Q2 217 ppm lead
Niton 1544

Sample Collected By: AMP

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 4581 **Sample Number:** 13 **QC Code:** ____ **Matrix:** Solid **Tag ID:** 4581-13-__

Project ID: BMA71700 **Project Manager:** Bruce Morrison
Project Desc: Herculaneum Pb Smelter site - Removal Support/Recontamination soil sampling
City: Herculaneum **State:** Missouri
Program: Superfund
Site Name: HERCULANEUM LEAD SMELTER SITE - SITE EVALUATION/DISPOSITION **Site ID:** A717 **Site OU:** 00

Location Desc: HER-RS-13
External Sample Number: RS-13

Expected Conc: (or Circle One: Low Medium High) **Date** 7/29/09 **Time(24 hr)** 15:00
Latitude: ____ **Sample Collection: Start:** 7/29/09
Longitude: ____ **End:** 7/29/09 15:00

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP
0 -	4 Deg C	0 Days	1 Percent Solid

Sample Comments:

(N/A)

Q1 86 ppm lead
Nim 1544

Sample Collected By: AMP

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 4581 **Sample Number:** 14 **QC Code:** ____ **Matrix:** Solid **Tag ID:** 4581-14-____

Project ID: BMA71700 **Project Manager:** Bruce Morrison
Project Desc: Herculaneum Pb Smelter site - Removal Support/Recontamination soil sampling
City: Herculaneum **State:** Missouri
Program: Superfund
Site Name: HERCULANEUM LEAD SMELTER SITE - SITE EVALUATION/DISPOSITION **Site ID:** A717 **Site OU:** 00

Location Desc: _____

HER-RS-14

External Sample Number: _____

RS-14

Expected Conc: _____ (or Circle One: Low Medium High)

Date

Time(24 hr)

Latitude: _____

Sample Collection: Start:

7/29/09

16:00

Longitude: _____

End: ____/____/____

____:____

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP
0 -	4 Deg C	0 Days	1 Percent Solid

Sample Comments:

(N/A)

Q1

68 ppm lead

Nitin 1544

Sample Collected By: AMP

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 4581 **Sample Number:** 15 **QC Code:** ____ **Matrix:** Solid **Tag ID:** 4581-15-____

Project ID: BMA71700 **Project Manager:** Bruce Morrison
Project Desc: Herculaneum Pb Smelter site - Removal Support/Recontamination soil sampling
City: Herculaneum **State:** Missouri
Program: Superfund
Site Name: HERCULANEUM LEAD SMELTER SITE - SITE EVALUATION/DISPOSITION **Site ID:** A717 **Site OU:** 00

Location Desc: HER-15-15
External Sample Number: RS-15

Expected Conc: _____ (or Circle One: Low Medium High) **Date** 7/30/09 **Time(24 hr)** 13:00
Latitude: _____ **Sample Collection: Start:** 7/30/09
Longitude: _____ **End:** 7/30/09 13:00

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP
0 -	4 Deg C	0 Days	1 Percent Solid

Sample Comments:

(N/A)

Q4 118 ppm Lead
Nitin 1544

Sample Collected By: AMP

Sample Collection Field Sheet

US EPA Region 7

Kansas City, KS

ASR Number: 4581 Sample Number: 16 QC Code: Matrix: Solid Tag ID: 4581-16-__

Project ID: BMA71700 **Project Manager:** Bruce Morrison
Project Desc: Herculaneum Pb Smelter site - Removal Support/Recontamination soil sampling
City: Herculaneum **State:** Missouri
Program: Superfund
Site Name: HERCULANEUM LEAD SMELTER SITE - SITE EVALUATION/DISPOSITION **Site ID:** A717 **Site OU:** 00

Location Desc: HER-RS-16

External Sample Number: RS-16

Expected Conc: (or Circle One: Low Medium High) **Date** **Time(24 hr)**

Latitude: ____

Sample Collection: Start: 7/30/09

13:00

Longitude: ____

End: ____

__:

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP
0 -	4 Deg C	0 Days	1 Percent Solid

Sample Comments:

(N/A)

Q2

370 ppm lead

Niton 1544

Sample Collected By: AMP

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 4581 **Sample Number:** 17 **QC Code:** ____ **Matrix:** Solid **Tag ID:** 4581-17-__

Project ID: BMA71700 **Project Manager:** Bruce Morrison
Project Desc: Herculaneum Pb Smelter site - Removal Support/Recontamination soil sampling
City: Herculaneum **State:** Missouri
Program: Superfund
Site Name: HERCULANEUM LEAD SMELTER SITE - SITE EVALUATION/DISPOSITION **Site ID:** A717 **Site OU:** 00

Location Desc: HER-RS-17

External Sample Number: RS17

Expected Conc: _____ (or Circle One: Low Medium High) **Date** **Time(24 hr)**

Latitude: _____ **Sample Collection: Start:** 7/31/09 10:00

Longitude: _____ **End:** / / :

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP
0 -	4 Deg C	0 Days	1 Percent Solid

Sample Comments:

(N/A)

Q1 110 ppm lead
Niton 1544

Sample Collected By: AMP

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 4581 **Sample Number:** 18 **QC Code:** ____ **Matrix:** Solid **Tag ID:** 4581-18-__

Project ID: BMA71700 **Project Manager:** Bruce Morrison
Project Desc: Herculaneum Pb Smelter site - Removal Support/Recontamination soil sampling
City: Herculaneum **State:** Missouri
Program: Superfund
Site Name: HERCULANEUM LEAD SMELTER SITE - SITE EVALUATION/DISPOSITION **Site ID:** A717 **Site OU:** 00

Location Desc: _____

HER-KS-18

External Sample Number: _____

KS-18

Expected Conc: _____ (or Circle One: Low Medium High)

Date

Time(24 hr)

Latitude: _____

Sample Collection: Start: _____

7/31/09

10:00

Longitude: _____

End: ____/____/____

__:_:__

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP
0 -	4 Deg C	0 Days	1 Percent Solid

Sample Comments:

(N/A)

P.A.

139 ppm Lead

Niton 1544

Sample Collected By: AMP

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 4581 **Sample Number:** 19 **QC Code:** ____ **Matrix:** Solid **Tag ID:** 4581-19-__

Project ID: BMA71700 **Project Manager:** Bruce Morrison
Project Desc: Herculaneum Pb Smelter site - Removal Support/Recontamination soil sampling
City: Herculaneum **State:** Missouri
Program: Superfund
Site Name: HERCULANEUM LEAD SMELTER SITE - SITE EVALUATION/DISPOSITION **Site ID:** A717 **Site OU:** 00

Location Desc: HER-KS-19

External Sample Number: KS-19

Expected Conc: _____ (or Circle One: Low Medium High) **Date** 7/31/09 **Time(24 hr)** 12:00
Latitude: _____ **Sample Collection: Start:** 7/31/09
Longitude: _____ **End:** 7/31/09 12:00

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP
0 -	4 Deg C	0 Days	1 Percent Solid

Sample Comments:

(N/A)

Q3

146 ppm lead
Niton 1544

Sample Collected By: AMP

Sample Collection Field Sheet

US EPA Region 7

Kansas City, KS

ASR Number: 4581 Sample Number: 20 QC Code: ____ Matrix: Solid Tag ID: 4581-20-____

Project ID: BMA71700 **Project Manager:** Bruce Morrison
Project Desc: Herculanum Pb Smelter site - Removal Support/Recontamination soil sampling
City: Herculanum **State:** Missouri
Program: Superfund
Site Name: HERCULANEUM LEAD SMELTER SITE - SITE EVALUATION/DISPOSITION **Site ID:** A717 **Site OU:** 00

Location Desc: _____

HER-PS-20

External Sample Number: _____

PS-20

Expected Conc: _____ (or Circle One: Low Medium High) **Date** _____ **Time(24 hr)** _____

Latitude: _____

Sample Collection: Start: _____

7/31/09

14:00

Longitude: _____

End: ____/____/____

____:____

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP
0 -	4 Deg C	0 Days	1 Percent Solid

Sample Comments:

(N/A)

Q3

857 ppm Lead

Nitro 1544

Sample Collected By: AMP